



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene
201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

August 15, 2014

Public Health & Emergency Preparedness Bulletin: # 2014:32 Reporting for the week ending 08/09/14 (MMWR Week #32)

CURRENT HOMELAND SECURITY THREAT LEVELS

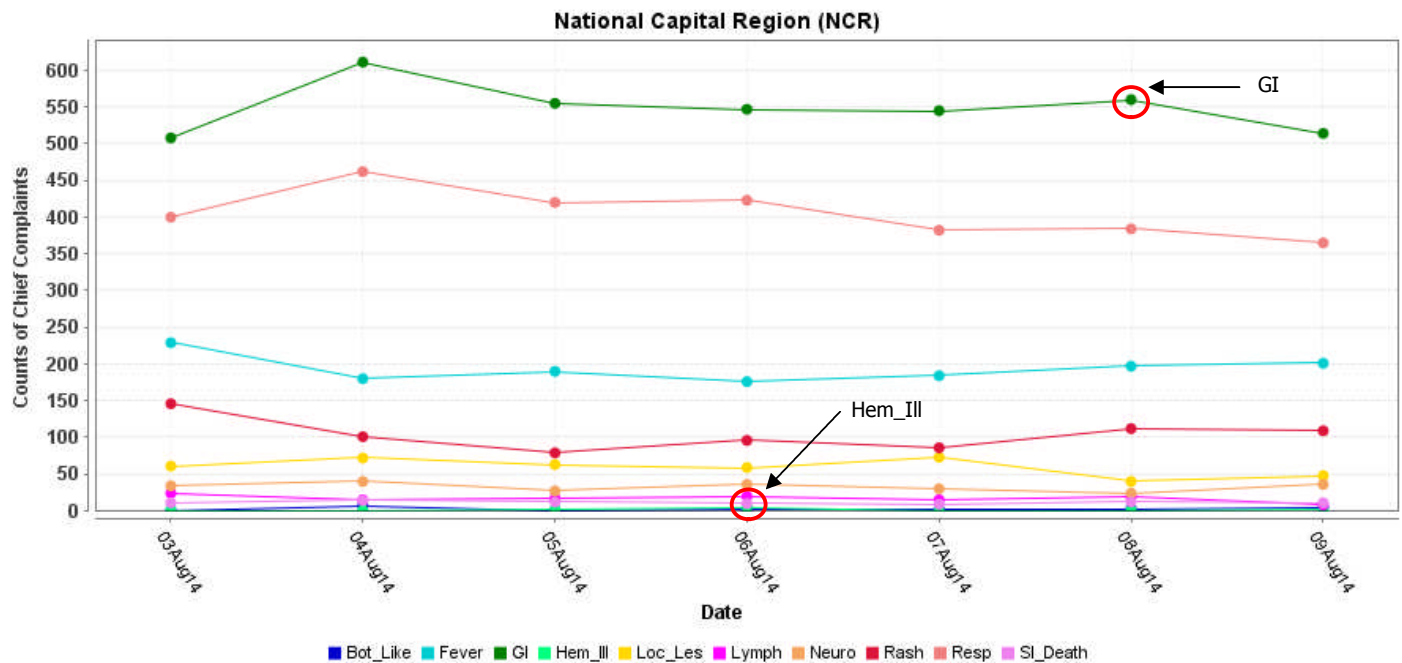
National: No Active Alerts
Maryland: Level Four (MEMA status)

SYNDROMIC SURVEILLANCE REPORTS

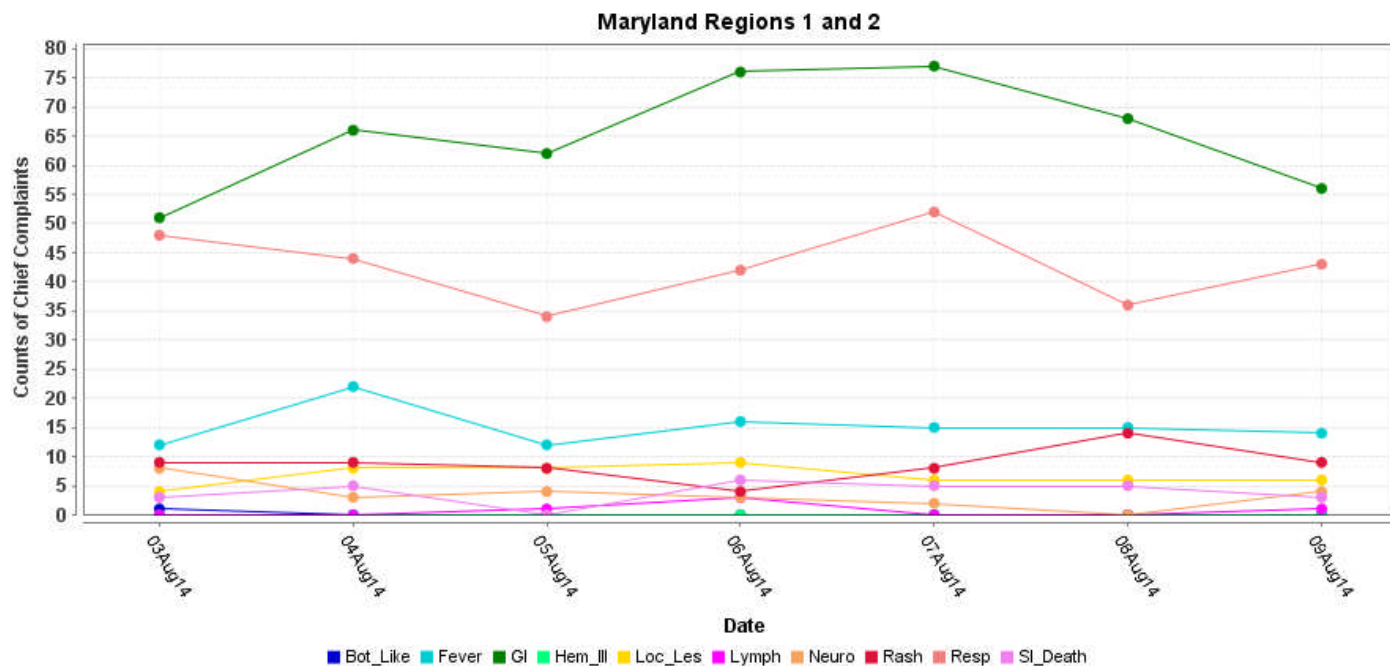
ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):

Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

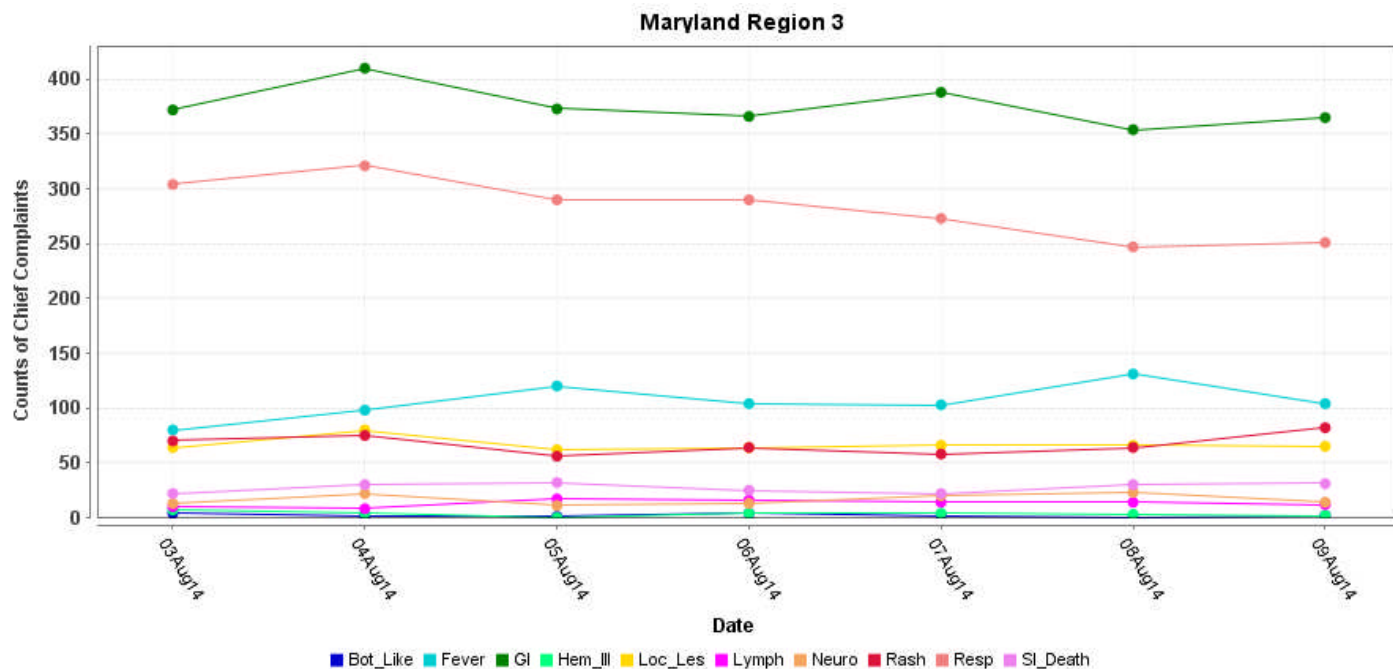
Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.



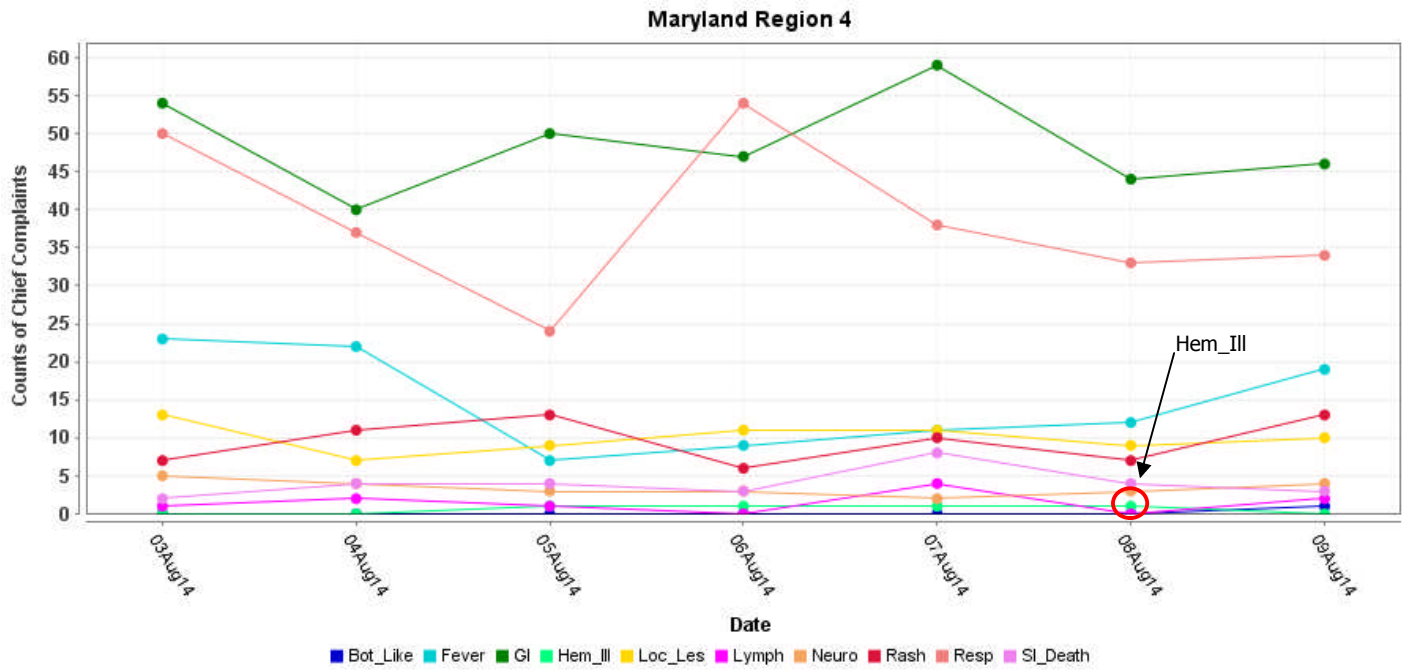
MARYLAND ESSENCE:



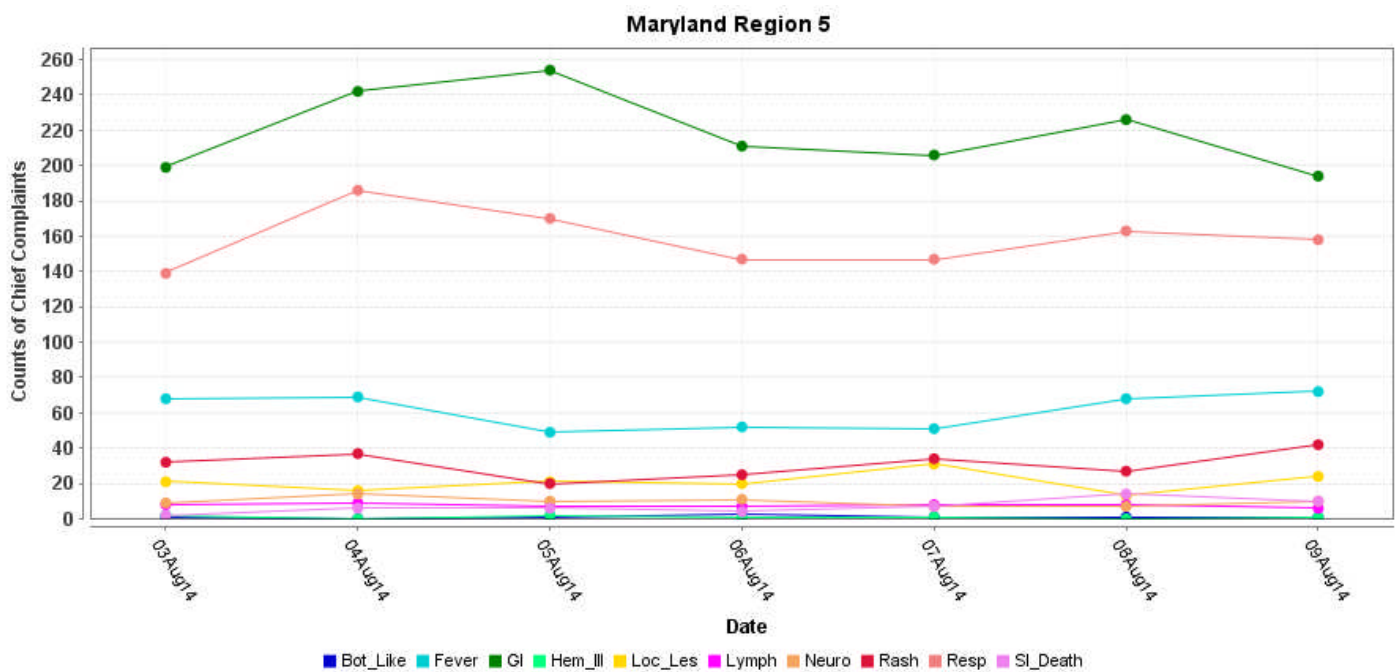
* Region 1 and 2 includes EDs in Allegany, Frederick, Garrett, and Washington counties reporting to ESSENCE



* Region 3 includes EDs in Anne Arundel, Baltimore City, Baltimore, Carroll, Harford, and Howard counties reporting to ESSENCE



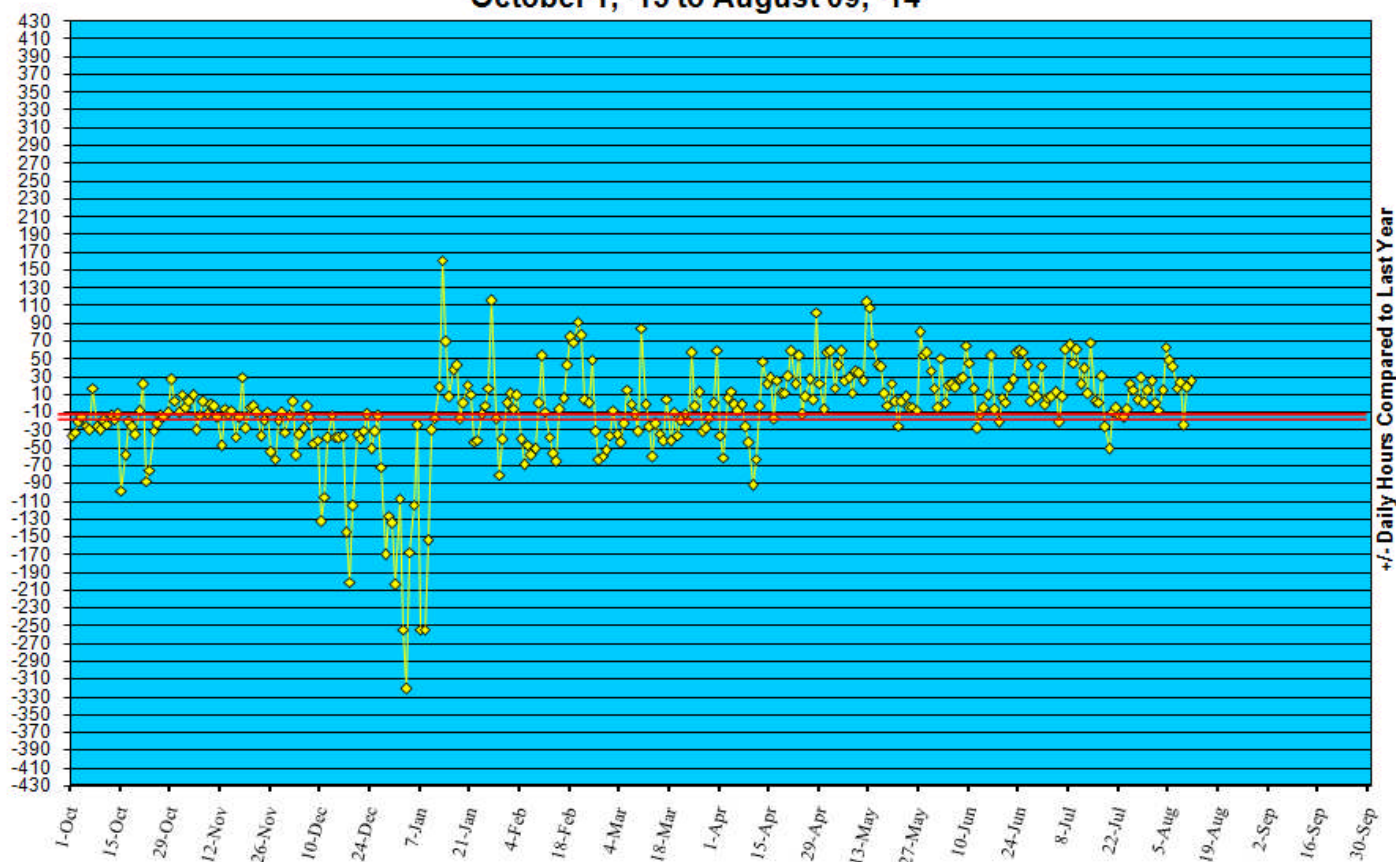
* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE



* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

REVIEW OF EMERGENCY DEPARTMENT UTILIZATION

Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '13 to August 09, '14



YELLOW ALERT TIMES (ED DIVERSION): The reporting period begins 10/01/13.

REVIEW OF MORTALITY REPORTS

Office of the Chief Medical Examiner: OCME reports no suspicious deaths related to an emerging public health threat for the week.

MARYLAND TOXIDROMIC SURVEILLANCE

Poison Control Surveillance Monthly Update: Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in July 2014 did not identify any cases of possible public health threats.

REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

Meningitis:

New cases (August 3 – August 9, 2014):

Prior week (July 27 – August 2, 2014):

Week#32, 2013 (August 4 – August 10, 2013):

Aseptic

5

11

9

Meningococcal

0

0

0

9 outbreaks were reported to DHMH during MMWR week 32 (August 3-9, 2014).

4 Gastroenteritis outbreaks

- 1 outbreak of GASTROENTERITIS in a Hospital
- 1 outbreak of GASTROENTERITIS in a Continuing Care Retirement Community
- 1 outbreak of GASTROENTERITIS in a Shelter
- 1 outbreak of GASTROENTERITIS associated with a Camp

1 Foodborne outbreak

- 1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Restaurant

3 Rash illness outbreaks

- 2 outbreaks of HAND, FOOT, AND MOUTH DISEASE associated with Daycare Centers
- 1 outbreak of HAND, FOOT, AND MOUTH DISEASE in a Residential Treatment Facility

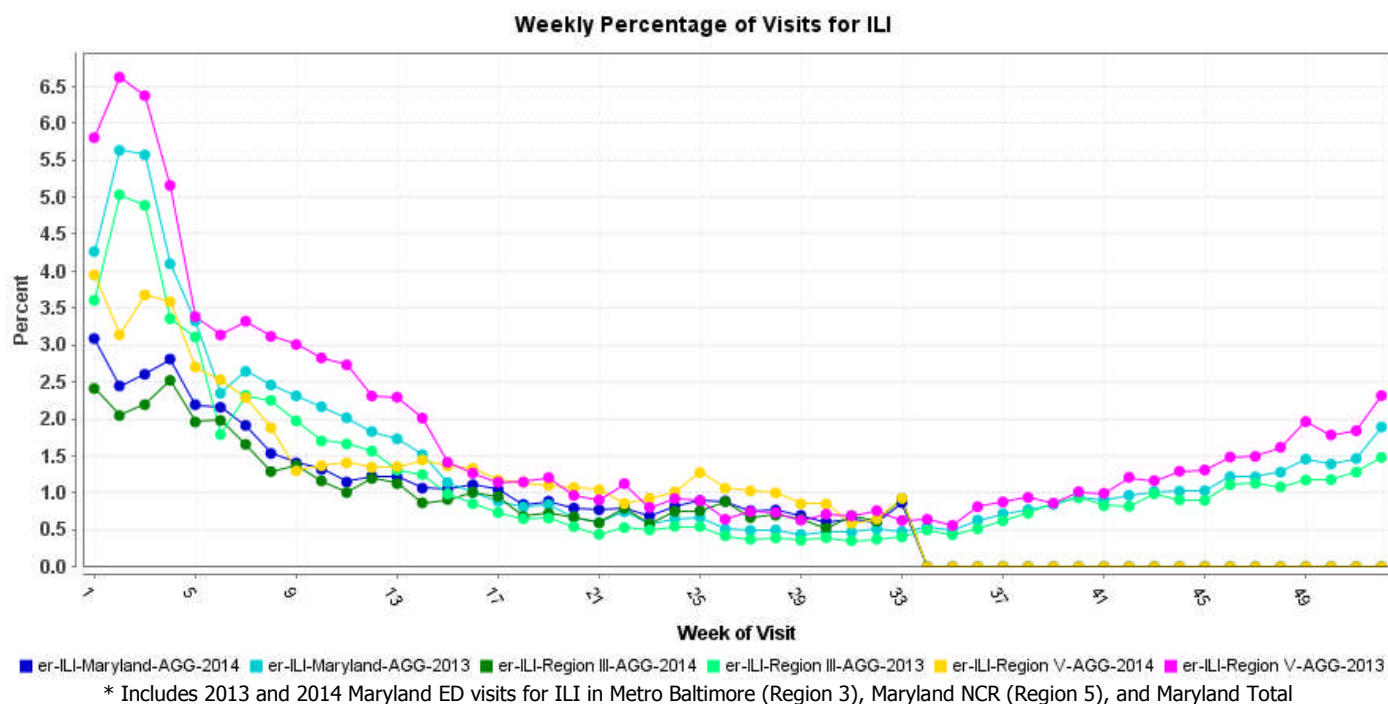
MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting generally occurs October through May. The final reporting period for 2014 was MMWR Week 20.

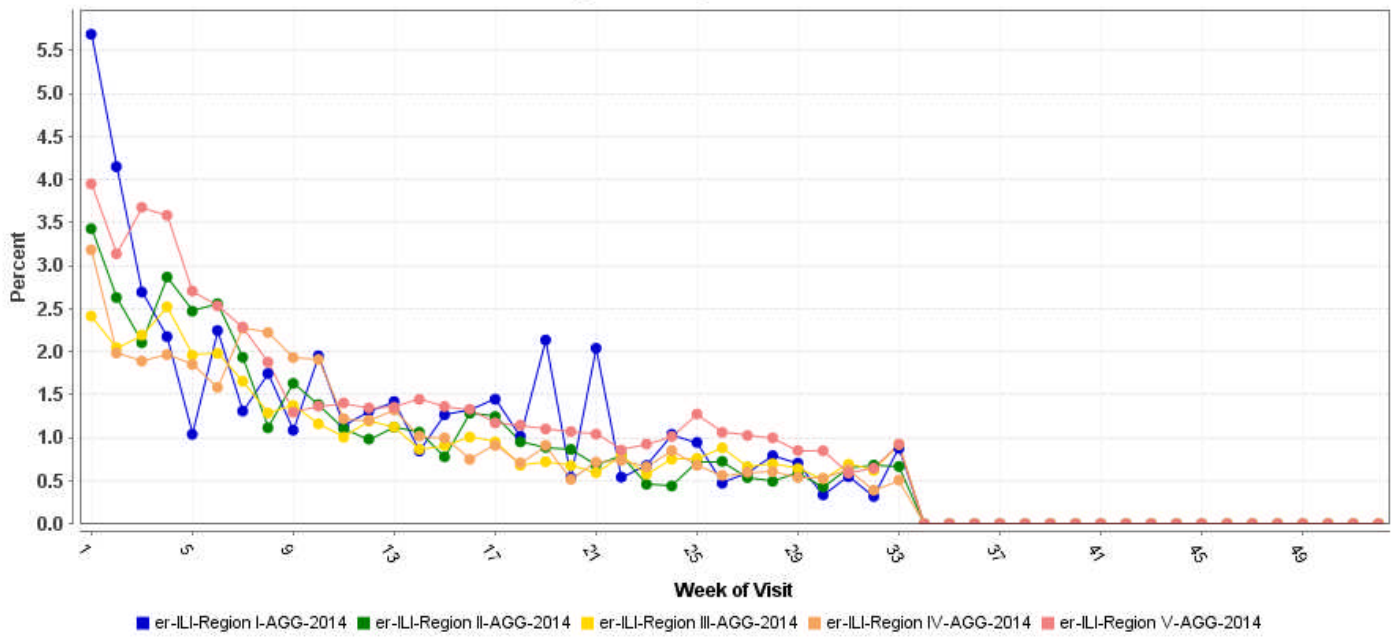
SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



Weekly Percentage of Visits for ILI

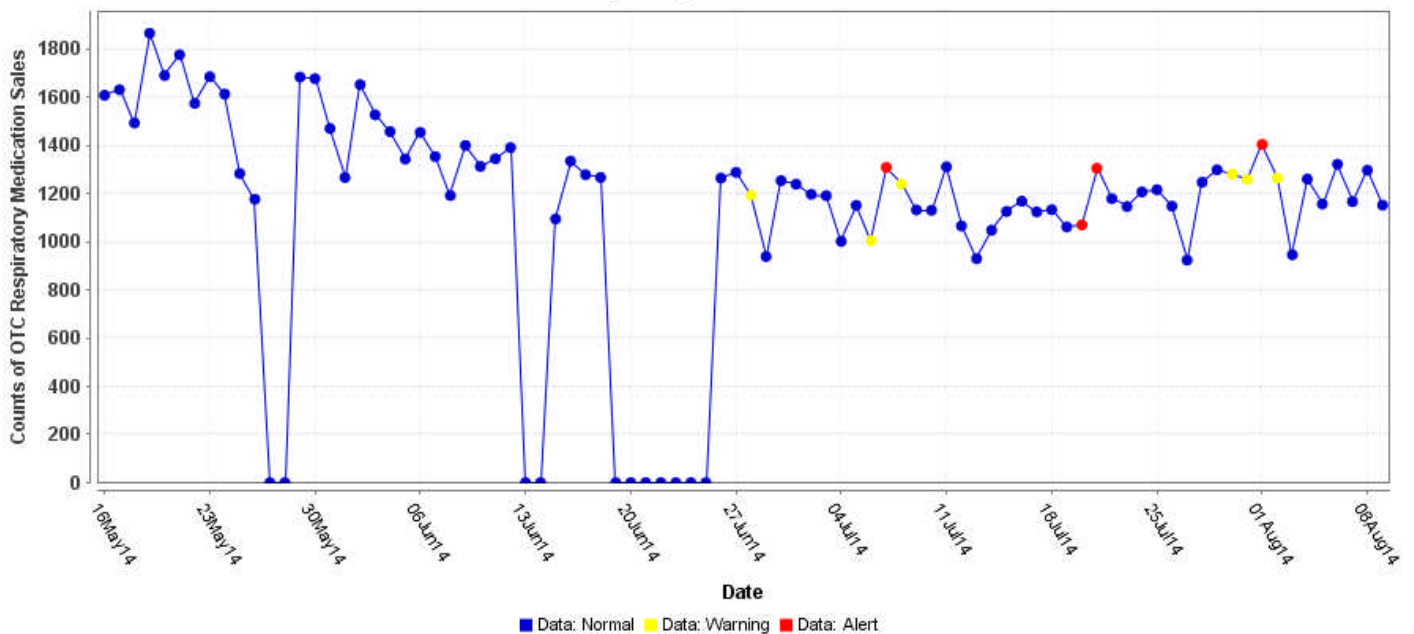


*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.

OTC Respiratory Medication Sales



PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS

WHO update: The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

Alert phase: This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

NATIONAL DISEASE REPORTS*

BOTULISM (OHIO): 06 August 2014, Two Cincinnati [Ohio] residents have been hospitalized with botulism after a nationwide recall of California sauces. Steven Englander, director of the Center for Public Health Preparedness in the Cincinnati Health Department, said they have found presumptive laboratory evidence of type B botulism and confirmed 2 clinical cases of botulism. According to the CDC, botulism is a rare and serious illness, with only 145 cases reported in the USA each year. Of those cases, 15 percent are foodborne Englander said in an email to city spokesman Rocky Merz [Mon 4 Aug 2014] that the patients, both in their 20s, were improving. One patient was on a ventilator and had been transferred to an acute long-term care facility. The other patient was off assisted breathing. That patient may have since been discharged. The Cincinnati Health Department says a pesto sauce seems to be the cause in both cases. The California Department of Public Health [CDPH] warned consumers last week [week of 28 Jul 2014] not to eat VR Green Farms jarred sauces because they were possibly contaminated with botulism. At that time, the CDPH announced they were working with the FDA as well as the Ohio Department of Health to investigate botulism infections possibly associated with VR Green Farms' Pine Nut Basil Pesto. VR Green Farms voluntarily recalled Pine Nut Basil Pesto, Pickled Farm Mix, Old World Tomato Sauce, Sundried Tomatoes in Olive Oil, Tuscan Grilling Sauce, and Pasta Sauce. (Botulism is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect cases

E COLI (MINNESOTA): 08 August 2014, The E. coli O157 that sickened at least 8 in [Rice County] came from a traveling petting zoo, according to preliminary test results released by the state on Fri 8 Aug 2014. The Minnesota Department of Health received the positive preliminary test results after taking samples from animals that were part of the Zerebko Zoo Tran petting zoo at the Rice County Fair in mid-July 2014. The Department of Health has been investigating 8 different cases of E. coli in Rice County confirmed between 9 and 24 Jul 2014, 5 of which required hospitalization. However, District One Hospital has reported that there have been 9 cases in Rice County. The only way the Department of Health is made aware of a case is if someone calls their hotline or if a doctor submits the patient's stool sample. Although the preliminary results have come back positive, the Minnesota Department of Health said there are numerous sub-strains of E. coli O157:H7. Because of the sub-strains, further testing is being done, but they have confirmed that the strain that was found in each case is E. coli O157:H7. The Department of Health said they're expecting final results early next week [week of 11 Aug 2014]. The results will include DNA fingerprinting, which will identify whether the organism found in the samples is an exact match to the strain that is making people sick. Carrie Klumb, an epidemiologist with the Department of Health, said all of the cases have one thing in common: contact with an animal. Wally Zerebko, owner of Zerebko Zoo Tran in Bovey [in Itasca County, Minnesota], said the preliminary results are inconclusive. As the Department of Health continues to investigate and await the final results, Zerebko and his animals remain at home. "They are telling me lives are at stake, I know that," he said. "That's why I am at home and why I encouraged them to come down and test." Zerebko brought his petting zoo to Olmsted County following the Rice County Fair where he says they had 100 times the people passing through, but he hasn't heard of any cases of E. coli there. The Department of Health said its investigation is ongoing, but at this time it doesn't have any confirmed cases from the Olmsted County Fair as part of this outbreak. (Food safety threats are listed in Category B on the CDC List of Critical Biological Agents) *Non-suspect cases

INTERNATIONAL DISEASE REPORTS*

HANTAVIRUS (CANADA): 05 Aug 2014, Saskatchewan health officials are advising the public to take precautions against hantavirus infections after reporting the 4th case and 2nd fatality of 2014 in a northern Saskatchewan adult. They note that deer mice [*Peromyscus maniculatus*], the animal that carries the disease [virus], are present throughout Saskatchewan. [Sin Nombre] hantavirus is transmitted by breathing in contaminated airborne particles from the droppings, urine and saliva of infected deer mice. "People should be aware of mouse droppings and nesting materials when cleaning buildings," Saskatchewan's Deputy Chief Medical Health Officer Denise Werker said. "Take precautions to prevent direct contact and inhalation of particles that may be contaminated." Symptoms of hantavirus pulmonary syndrome include fever, muscle aches, cough, headaches, nausea, and vomiting followed by shortness of breath and respiratory failure. Hantavirus pulmonary syndrome is a rare but usually severe disease that can lead to death. There have been 30 cases of hantavirus pulmonary syndrome reported in Saskatchewan since 1994, 10 of which resulted in death. (Hantavirus is listed in Category C on the CDC List of Critical Biological Agents) *Non-suspect cases

ANTHRAX (RUSSIA): 07 Aug 2014, A town in the midwest Russian region of Tatarstan has been placed under quarantine after a local resident was diagnosed with anthrax. The region's head, Rustam Minnikhanov, on Thursday [7 Aug 2014] declared a 2-month ban on transporting animals and animal products into or out of the town of Lyuga, which is seeing the region's 1st anthrax case in 11 years. Local residents are also prohibited from slaughtering livestock for consumption and from using milk produced by animals that could be infected. The quarantine could be shortened to 15 days provided that no further cases occur and that all safety measures have been fully observed, Minnikhanov said in a decree. On Monday [4 Aug 2014], a resident of Lyuga, 48-year-old FG, was hospitalized in the regional capital, Kazan, and was diagnosed with cutaneous anthrax. Although often less fatal than respiratory anthrax, the cutaneous form of the disease can be contracted through spores when handling contaminated animal products. Tatarstan's Health Ministry said that 19 people who had been in direct contact with FG were being screened for anthrax twice daily. Of the 190 people tested for anthrax in Lyuga, no one other than FG has been found to be afflicted with the illness. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect case

ANTHRAX (ROMANIA): 08 Aug 2014, A man and a woman have been hospitalized in Caracal in Olt County and in the Pitesti hospital in Arges showing symptoms of anthrax infection. The 1st case is a woman from the village of Colonesti who was admitted to hospital in Pitesti. Most likely, she contracted the bacteria from the carcass of an animal brought by floods last week. The other case of anthrax disease is a man from the village of Dobrosloveni. It seems that he slaughtered an animal in the household and was cut by one of the bones. The man was admitted to the hospital in Caracal. "I'm suspicious. Nothing confirmed yet. For now, the patients are hospitalized, one in Pitesti and the other in Caracal. The laboratory has yet to confirm the initial diagnoses. The patients are in hospital in a controlled environment. They are in good condition," said Dr. Victorita Diaconescu, DSP manager Olt. Doctors took samples and sent them Cantacuzino Institute in Bucharest, which will announce the results of analyzes Mon 11 Aug 2014. Meanwhile, River Health Department inspectors are investigating the sources of infection. Anthrax is an acute infectious disease caused by the bacterium *Bacillus anthracis*. This microbe's spores are found in the soil and can be ingested by sheep, cows, horses and goats (livestock grazing). Anthrax most commonly occurs in warm-blooded animals but can also infect humans. When inhaled by people, bacteria cause respiratory failure and death of the patient in less than one week. Transmission to humans is usually through contact with infected animals but may also occur as a result of breathing air filled with the bacillus spores. The disease mainly affects individuals who handle animal hides (farmers, butchers and veterinarians) or spin wool. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Suspect cases

ANTHRAX (TURKEY): 09 Aug 2014, Ten people fell ill with anthrax in the Haymana district of Ankara after butchering cattle affected with anthrax. According to information obtained from Tepekoy county, 12 people were bringing cattle back from grazing in the neighborhood when the animals started dropping dead. Not wanting to have a total loss, the carcasses were butchered, and the meat shared with their neighbors. Later, 10 people were taken to hospital, found to have cutaneous anthrax, treated, and released. Headman Necati Sea said in a statement: "It is suspected that the infections followed from exposing cuts to the infected blood. Currently, our neighborhood life has returned to normal. Official investigations are continuing. A panic situation does not exist. There will be animal movement controls into and out of the district for a limited time," he said. Following the detection of cases, and a Food, Agriculture and Livestock Directorate quarantine in Tepekoy, life was back to normal. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect cases

EBOLA (GUINEA, LIBERIA, NIGERIA, SIERRA LEONE): 11 Aug 2014, Between 7-9 Aug 2014, 69 new cases (laboratory-confirmed, probable, and suspect cases) of EVD and 52 deaths were reported from the 4 countries as follows: Guinea, 11 new cases and 6 deaths; Liberia, 45 new cases and 29 deaths; Nigeria, 0 new cases and 0 deaths; and Sierra Leone, 13 new cases and 17 deaths. [The table in the source gives confirmed, probable, and suspect cases and deaths from Ebola virus disease in Guinea, Liberia, Nigeria, and Sierra Leone, as of 9 Aug 2014, and shows Total Cases 1848, Deaths 1013. On 10 Aug 2014, Nigeria reported one more death. The recent treatment of 2 health workers, who were infected with EVD, with an experimental medicine has raised important questions about whether medicines or treatments that have never been tested or shown to be safe in humans should be used in this outbreak. Currently, quantities of the medicine are limited, which also raises questions about who should receive the treatment. The total number of cases is subject to change due to ongoing reclassification, retrospective investigation, and availability of laboratory results. Data reported in the Disease Outbreak News are based on official information reported by the Ministries of Health. (Viral hemorrhagic fevers are listed in Category A on the CDC List of Critical Biological Agents) *Non-suspect and suspect cases

National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

OTHER RESOURCES AND ARTICLES OF INTEREST

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmd.maryland.gov/> or follow us on Facebook at www.facebook.com/MarylandOPR.

Maryland's Resident Influenza Tracking System: <http://dhmh.maryland.gov/flusurvey>

NOTE: This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

Table: Text-based Syndrome Case Definitions and Associated Category A Conditions

Syndrome	Definition	Category A Condition
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents
(continued from previous page)

Syndrome	Definition	Category A Condition
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person > XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents (continued from previous page)

Syndrome	Definition	Category A Condition
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable

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CENTERS FOR DISEASE CONTROL AND PREVENTION**

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